# Force Health Protection Brief

## Papua New Guinea

**26 APR 2010**

# FORCE HEALTH PROTECTION

## Papua New Guinea

**Historical diseases present in area:** Diarrheal diseases, Hepatitis A, Malaria, Dengue Fever, Japanese Encephalitis (JE), Ciguatera Fish Poisoning, and Tuberculosis (TB)**.**

**Recent Disease Reports:** Travelers' Diarrhea**,** recent Cholera outbreak, HIV, Malaria (*Plasmodium falciparum* and *vivax),* and Dengue Fever.

**Force Health Protection Requirements**: Up-to-date in immunizations, JE vaccination required for RON personnel, anti-malarial protocols, insect precautions, use approved food and water sources. PNG considered rabies free.

**Medical infrastructure:** Hospitals are not equivalent to Western standards. For severe illness or injuries utilize Commander 7th Fleet Annex "Q" requirements for medical treatment.

**Environmental Hazards:** Avoid congested areas due to TB and avoid local seafood (grouper, snapper, amberjack, and barracuda) as Ciguatera Fish Poisoning may be present in undercooked and well-cooked fish.

26 Apr 2010

**Assessment: Moderate health risk to operational forces.**

# FORCE HEALTH PROTECTION

## POINTS OF CONTACT

- **International SOS/TRICARE Operations Coordinator**
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- **TRICARE Area Office - Pacific**
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  - **Email: james.marron@med.navy.mil**
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- **United States Naval Forces Seventh Fleet Surgeon Liaison Officer**
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# FORCE HEALTH PROTECTION

## Food & Water

**Avoid**:

**Food stands**

**Fruits & veggies (unless peeled/cooke**

**Raw meat or fish**

**Drinking water other than bottled**

**Local lakes/ponds**

# FORCE HEALTH PROTECTION

## Personal Hygiene

**Frequency:** 5 times/day

**Timing:**

- **BEFORE eating**
- **BEFORE smoking**
- **AFTER bathroom**

# FORCE HEALTH PROTECTION

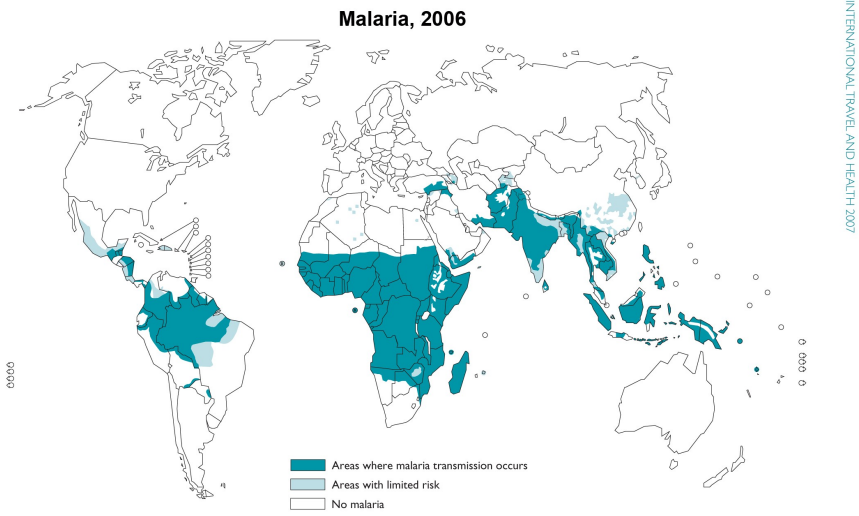
## Avoiding Insect Bites

- **Cover up**
  - **Long sleeves/pant**
- **Insect repellent**
  - **Permethrin**
  - **DEET**
- **Sleeping**
  - **Keep bugs OUT**
  - **Bed nets, window screens**

# FORCE HEALTH PROTECTION

## Malaria

- **Agent –** parasite, infects the blood cells.
- **Transmission -** bite of an infected female mosquito.
- **Signs/Symptoms -** Cycles of chills, fever, sweating, vomiting and yellowing (jaundice) of the skin/eyes.
- **Prevention –** Insect skin repellent (DEET), antimalarial medications, permethrin treated bed nets/clothing and use of insecticides.



# FORCE HEALTH PROTECTION

## Dengue and Dengue Hemorrhagic Fever

- **Causative Agent:** Virus (*Flavivirus*).
- **Transmission:** Bites of *Aedes* mosquitoes which are day biters.
- **Symptoms:** Fever, severe headache, backache, joint pains, nausea, vomiting, eye pain and rash.
- **Treatment:** Symptomatic treatment.
- **Prevention:** No vaccine available. Use insect skin repellent (DEET), permethrin treated bed nets/clothing, and use insecticides.

# Vector-borne Disease: Countermeasures

## INSECT REPELLENTS FOR SKIN AND CLOTHING

### DEET lotion

NSN 6840-01-284-3982

- Apply a thin coat to EXPOSED skin
- One application lasts up to 12 hours

### Permethrin

- Individual Dynamic Absorption Kit (IDA)
- Treatment lasts for for over 50 launderings

NSN 6840-01-345-0237

NSN 6840-01-278-1336

- Aerosol spray can
- Treatment lasts through 5-6 washes

## PERSONAL PROTECTIVE MEASURES

Permethrin On Uniform + DEET On Exposed Skin + Properly Worn Uniform = MAXIMUM PROTECTION

**DOD Insect Repellent System**

**YOU NEED TO KNOW...**
**Dry cleaning removes permethrin from the uniform**

# FORCE HEALTH PROTECTION

## Travelers' Diarrhea

- **Transmission:** Various; tainted food and water, poor sanitation.
- **Signs/Symptoms:** Abdominal cramping/pain, fever, and loose watery stools lasting 3-4 days.
- **Prevention:** Avoid local water, no raw or undercooked food, peel all fruits/veggies, avoid street vendors, and wash hands with soap prior to eating.
- **Treatment:** Antibiotics for bacterial infection (see health care provider) and Imodium AD (Loperamide). Do not take Imodium if you have blood in your stool.

# FORCE HEALTH PROTECTION

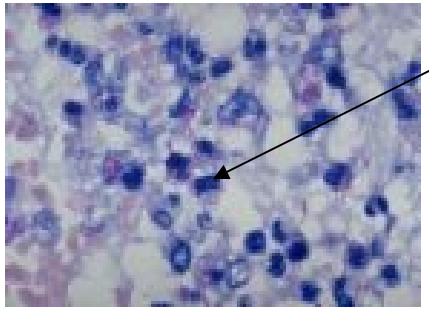
## Ciguatera Fish Poisoning

- **Causative Agent:** toxins produced by marine microalgae (*Gambierdiscus toxicus).*
- **Transmission:** eating fish contaminated with the toxin (barracuda, black grouper, blackfin snapper, cubera snapper, dog snapper, greater amberjack, hogfish, horse-eye jack, king mackerel, and yellowfin grouper have been known to carry ciguatoxins).
- **Symptoms:** nausea, vomiting, and neurologic symptoms such as tingling fingers or toes. Cold things may feel hot and hot things may feel cold.
- **Treatment:** symptomatic treatment. Ciguatera has no cure. Symptoms usually go away in days or weeks but can last for years.
- **Prevention:** avoid local seafood as Ciguatera Fish Poisoning may be present in undercooked and well-cooked fish.

# FORCE HEALTH PROTECTION

## Tuberculosis (TB)

- **Causative Agent:** Bacteria (*Mycobacterium tuberculosis*).
- **Transmission:** Airborne droplet via respiration.
- **Symptoms:** Cough, fatigue, night sweats, fever and rapid heart rate.
- **Treatment:** Antibiotics (some strains resistant to multiple drugs) and respiratory isolation.
- **Prevention:** No vaccine available. Avoid contact with persons with active TB, congested areas, and receive annual screening (PPD).



***M. tuberculosis***

# FORCE HEALTH PROTECTION

## Sexually Transmitted Disease

**HIGH RISK FOR STDs - Hepatitis B, HIV, etc.**

### FHP Requirements

- **Avoid sexual contact.**
- **Use latex condoms if sexually active.**
- **Use Condom Sense!**

***STD diseases can be transmitted by tattoo needles.**

# FORCE HEALTH PROTECTION

## Local Animals

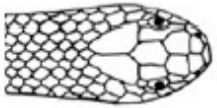
- **Many countries have NO rabies control programs!**
- **Do not feed or attempt to touch animals.**
- **Report bites immediately.**
- **No mascots!**

# VENOMOUS SNAKES

## COBRAS/KRAITS/CORAL SNAKES

Short fangs fixed in erect position in front of mouth.

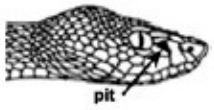
Round eye pupils.



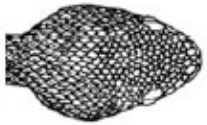
Head small and not distinct from the body.

## PIT

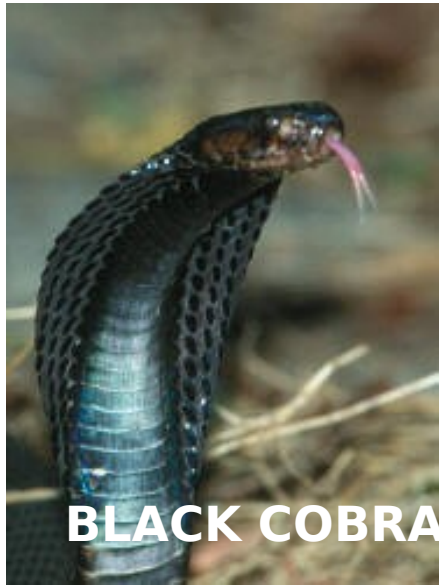
Long, hinged fangs that tuck into roof of mouth when not in use.




Vertically elliptical eye pupils; pit vipers with heat sensing organ between eye and nostril.



Broad triangular head very distinct from narrow neck.



# HAZARDOUS PLANTS

- Plant resins cause skin irritation
- Poisonous roots, stems, leaves, and fruit
- Weeds and stinging nettles
- Thorny shrubs and trees

## Poisonous Plants

***Mucuna pruritum***

**Systemic**

## Thorny Plant

**Punctures and Abrasions**

## COUNTERMEASURES

- Avoid touching unfamiliar plants
- Use clothing as protective barrier
- Rinse skin promptly after exposure
- Wash clothing after contact
- Never eat any part of unfamiliar

# Required Health Measures

- Pages 13-15 USNS Mercy Handbook
- Immunizations
- Malaria chemoprophylaxis
  - Terminal chemoprophylaxis*
- Mosquito & insect bite prevention
- Pre-mission health assessment
  - Include Tuberculosis (TB) screening test
  - G6PD blood test*
- Obtain personal medication

*Depends on itinerary – obtain specific guidance

# Required Immunizations

- Start vaccinations early to accommodate vaccines that require several doses within a series
- Mission-specific:
  - Hepatitis B*/**
  - Typhoid
  - Japanese Encephalitis**
  - Rabies**
- Routine:
  - Tetanus/diphtheria
  - Measles (MMR)
  - Polio
  - Varicella (chicken pox)
  - H1N1 Influenza
  - Seasonal Influenza
  - Hepatitis A

* Required for health care providers

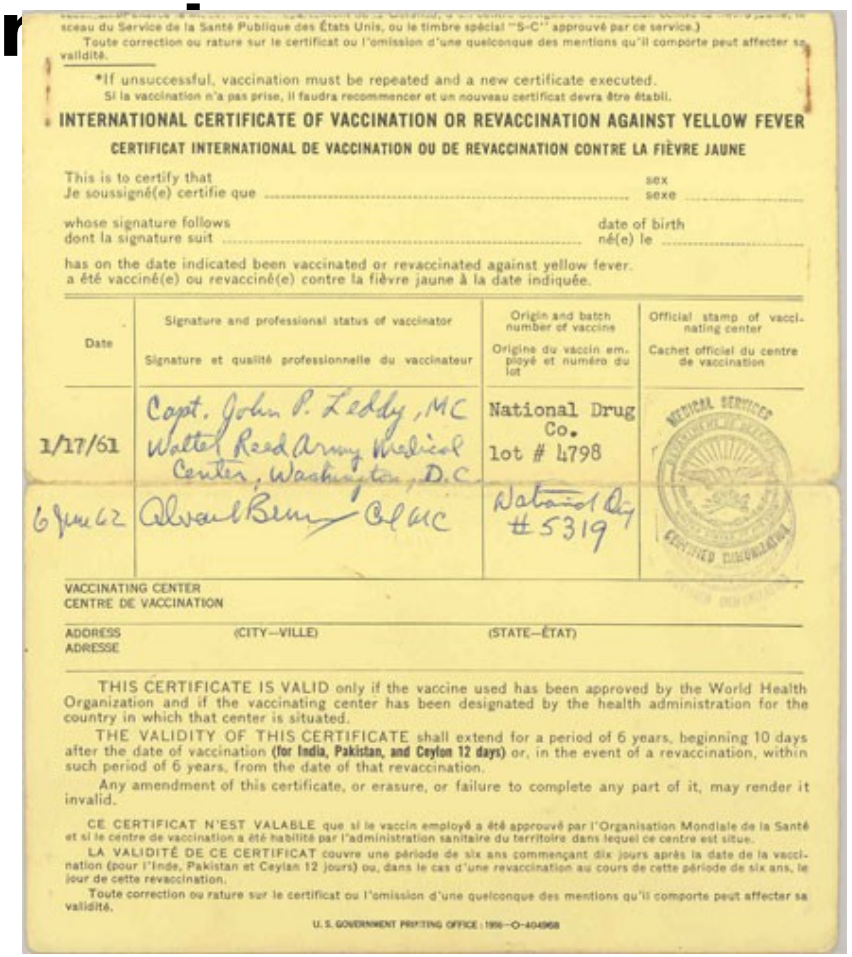
** For high risk groups only – obtain specific guidance

# FORCE HEALTH PROTECTION

## Papua New Guinea Entry Requirer

- **Although yellow fever is not a disease risk in Papua New Guinea, the government requires travelers arriving from countries where Yellow Fever is present (see guidance for countries in Africa, Central and South America) to present proof of yellow fever vaccination.**

- **Example of Yellow Fever card.**



sceau du Service de la Santé Publique des États Unis, ou le timbre spécial "S-C" approuvé par ce service.)
Toute correction ou rature sur le certificat ou l'omission d'une quelconque des mentions qu'il comporte peut affecter sa validité.

*If unsuccessful, vaccination must be repeated and a new certificate executed.
Si la vaccination n'a pas prise, il faudra recommencer et un nouveau certificat devra être établi.

**INTERNATIONAL CERTIFICATE OF VACCINATION OR REVACCINATION AGAINST YELLOW FEVER**

**CERTIFICAT INTERNATIONAL DE VACCINATION OU DE REVACCINATION CONTRE LA FIÈVRE JAUNE**

This is to certify that
Je soussigné(e) certifie que ..... sex / sexe .....

whose signature follows
dont la signature suit ..... date of birth / né(e) le .....

has on the date indicated been vaccinated or revaccinated against yellow fever.
a été vacciné(e) ou revacciné(e) contre la fièvre jaune à la date indiquée.

| Date | Signature and professional status of vaccinator<br>Signature et qualité professionnelle du vaccinateur | Origin and batch number of vaccine<br>Origine du vaccin employé et numéro du lot | Official stamp of vaccinating center<br>Cachet officiel du centre de vaccination |
|---|---|---|---|
| 1/17/61 | Capt. John P. Leddy, MC<br>Walter Reed Army Medical Center, Washington, D.C. | National Drug Co.<br>lot # 4798 | MEDICAL SERVICES |
| 6 Jun 62 | Alvan Burn Capt MC | National Dy<br>#5319 | |

VACCINATING CENTER
CENTRE DE VACCINATION

ADDRESS / ADRESSE (CITY—VILLE) (STATE—ÉTAT)

THIS CERTIFICATE IS VALID only if the vaccine used has been approved by the World Health Organization and if the vaccinating center has been designated by the health administration for the country in which that center is situated.

THE VALIDITY OF THIS CERTIFICATE shall extend for a period of 6 years, beginning 10 days after the date of vaccination **(for India, Pakistan, and Ceylon 12 days)** or, in the event of a revaccination, within such period of 6 years, from the date of that revaccination.

Any amendment of this certificate, or erasure, or failure to complete any part of it, may render it invalid.

CE CERTIFICAT N'EST VALABLE que si le vaccin employé a été approuvé par l'Organisation Mondiale de la Santé et si le centre de vaccination a été habilité par l'administration sanitaire du territoire dans lequel ce centre est situé.

LA VALIDITÉ DE CE CERTIFICAT couvre une période de six ans commençant dix jours après la date de la vaccination (pour l'Inde, Pakistan et Ceylan 12 jours) ou, dans le cas d'une revaccination au cours de cette période de six ans, le jour de cette revaccination.

Toute correction ou rature sur le certificat ou l'omission d'une quelconque des mentions qu'il comporte peut affecter sa validité.

U. S. GOVERNMENT PRINTING OFFICE : 1959—O-404968

# Questions?

- **Please contact your local health care provider**

- **Navy Environmental and Preventative Medicine Unit No. 6**

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  **nepmu6admin@med.navy.mil**

- **Navy Environmental and Preventative Medicine Unit No. 5**

  **Duty Phone: 619-556-7070**

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